

Solar Bulletin

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS
SOLAR SECTION



Rodney Howe, Editor, Chairperson
c/o AAVSO, 49 Bay State Rd
Cambridge, MA 02138

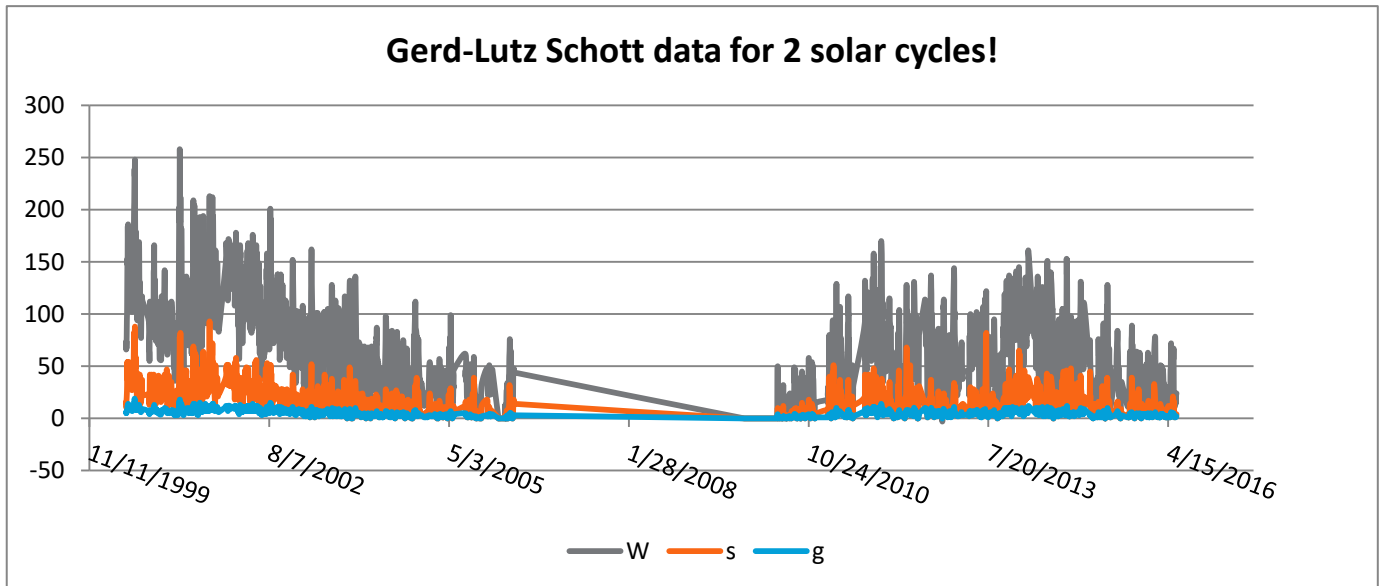
Web: <http://www.aavso.org/solar-bulletin>

Email: solar@aavso.org

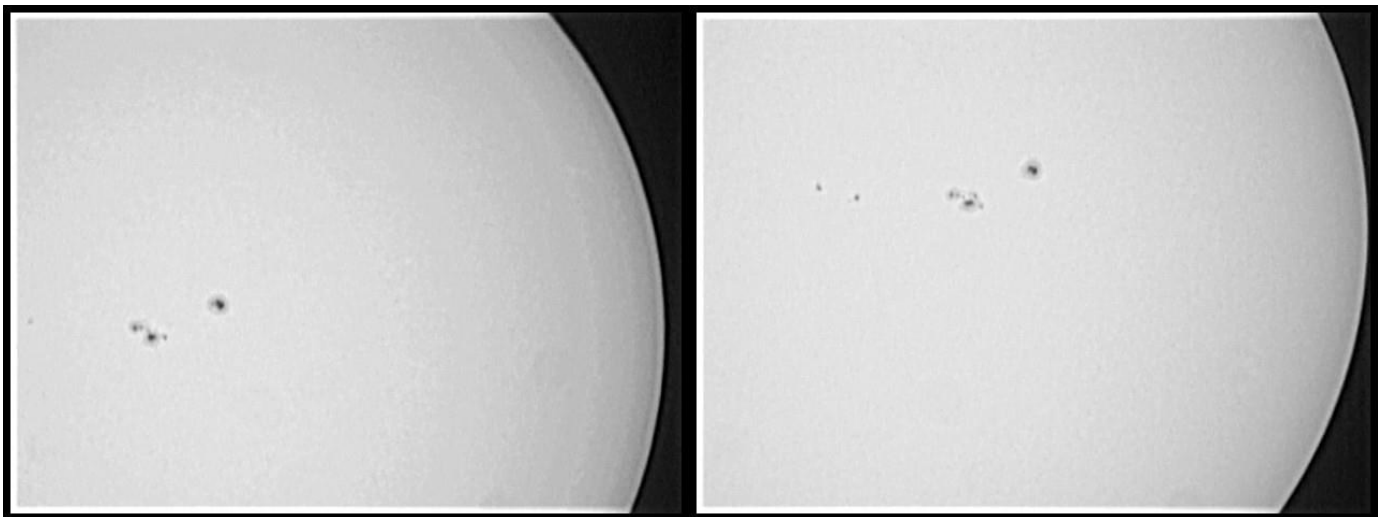
ISSN 0271-8480

Volume 72 Number 10

October - 2016

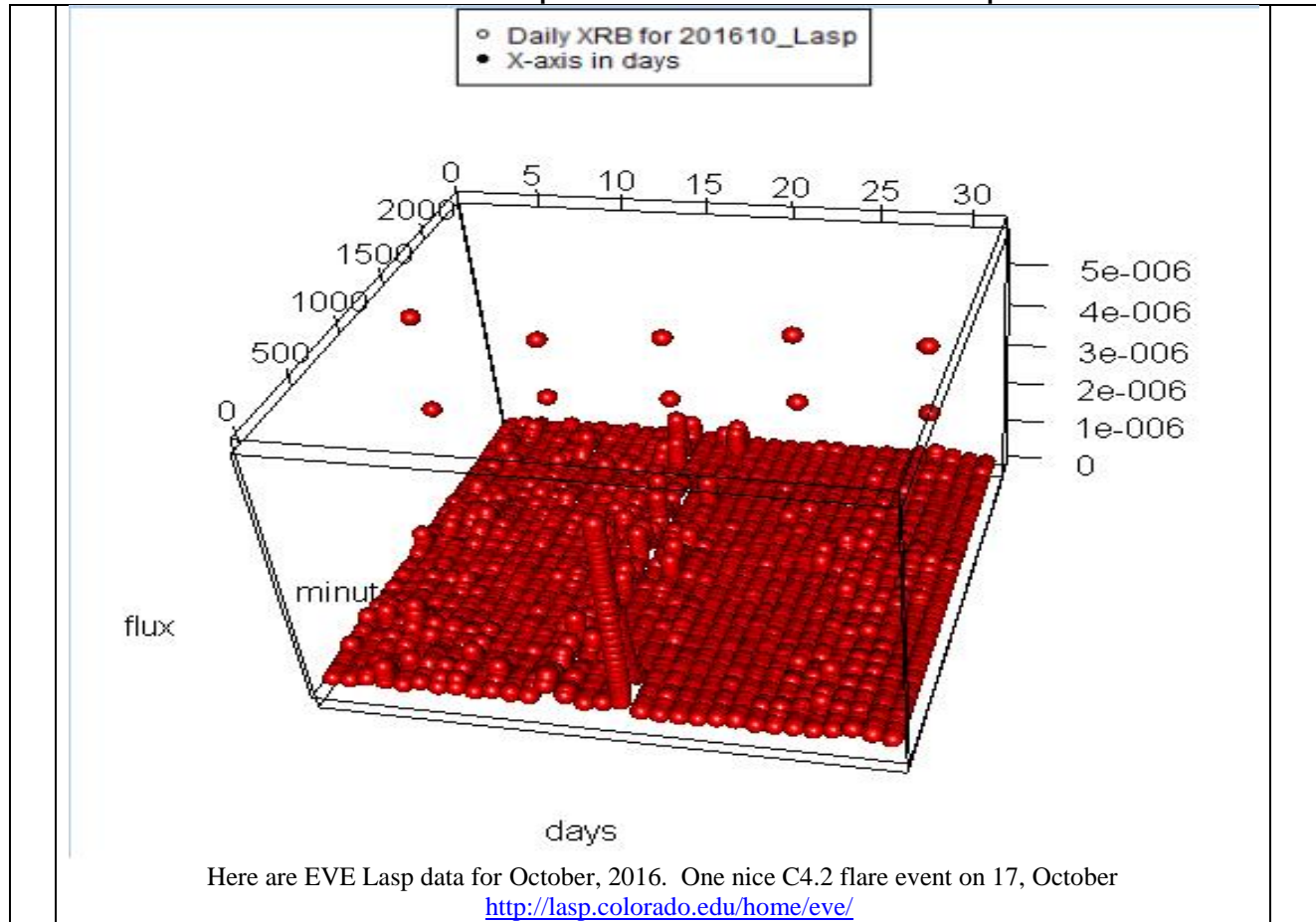


This Solar Bulletin is dedicated to Gerd-Lutz Schott (SCGL). It is very sad to inform you of the death of our friend and solar observer Gerd-Lutz Schott on 2nd August, 2016. You can see we have over 16 years of Gerd-Lutz's data in the solar database.



Dan Vidican (VIDD) sends these large groups of sunspots from September, 6 and 7, 2016. These may be the last large groups until the next solar cycle 25 starts up again (in a few years). October had only a very few groups and small sunspot counts.

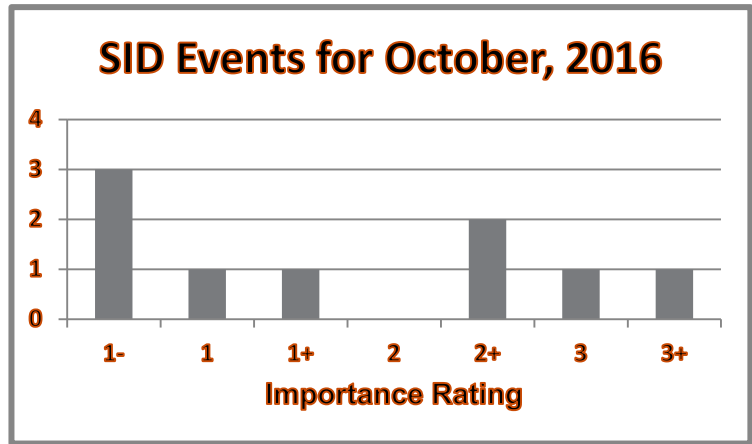
Sudden Ionospheric Disturbance Report



Sudden Ionospheric Disturbances (SID) Recordings During October, 2016

Date	Max	Imp
161004	409	2+
161012	1156	1+
161013	834	-1
161016	2302	1
161017	38	3+
161017	130	2+
161028	427	3

Solar Events

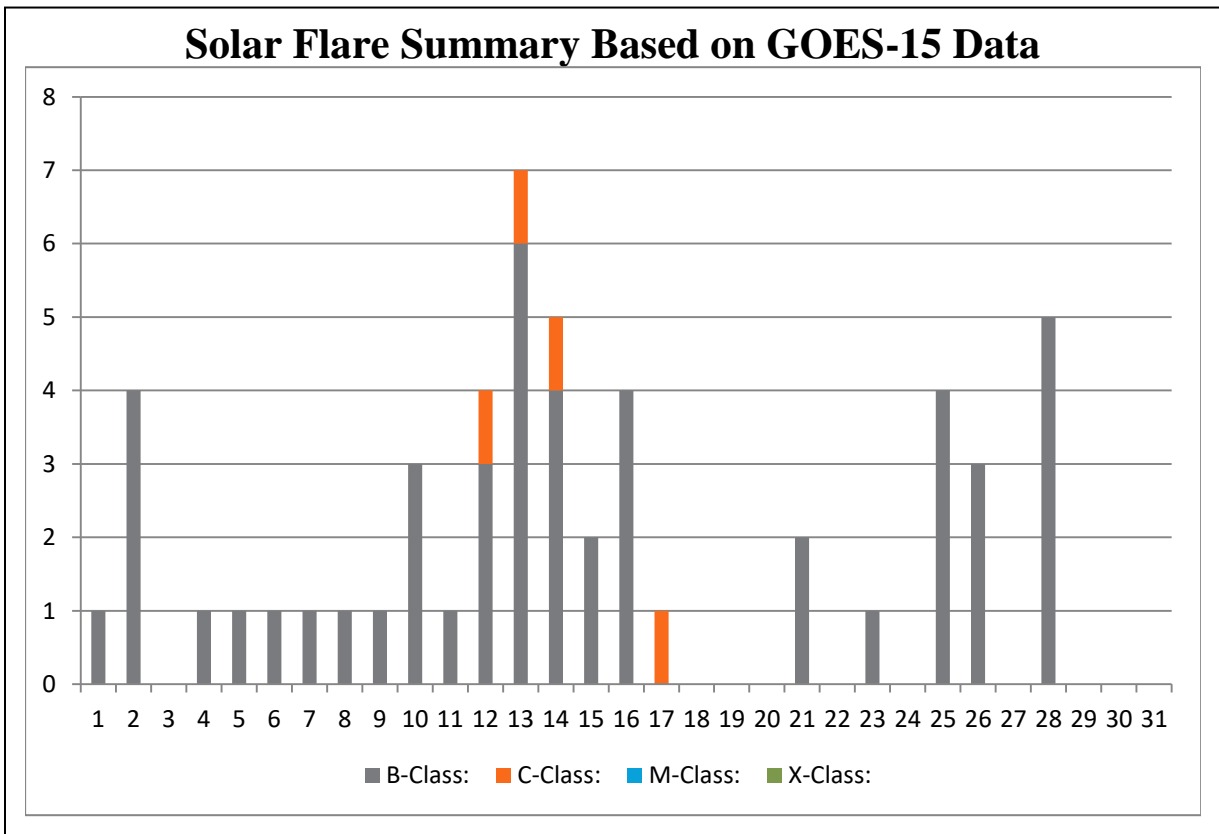


Importance rating: Duration (min)	1-: <19	1: 19-25	1+: 26-32	2: 33-45	2+: 46-85	3: 86-125	3+: 125
-----------------------------------	---------	----------	-----------	----------	-----------	-----------	---------

Sudden Ionospheric Disturbances (SID) Observers During October, 2016

Observer	Code	Station(s) monitored	Observer	Code	Station(s) monitored
A McWilliams	A94	NML	R Green	A134	NWC
R Battaiola	A96	HWU	S Aguirre	A138	NLK
J Wallace	A97	NAA	G Silvis	A141	NAA
L Loudet	A118	DHO	I Ryumshin	A142	DHO GQD
J Godet	A119	GBZ GQD ICV	R Rogge	A143	ICV
F Adamson	A122	NWC	K Menzies	A146	NAA
S Oatney	A125	NLK NML	D Russel	A147	NML
J Karlovsky	A131	DHO			

There were 53 solar flares measured by GOES-15 for October, 2016: Four C class and 49 B class flares. Far less flaring this month compared to last month. There were 10 days this month with no GOES 15 reports of flares. There were 15 AAVSO SID observers who submitted reports this month.



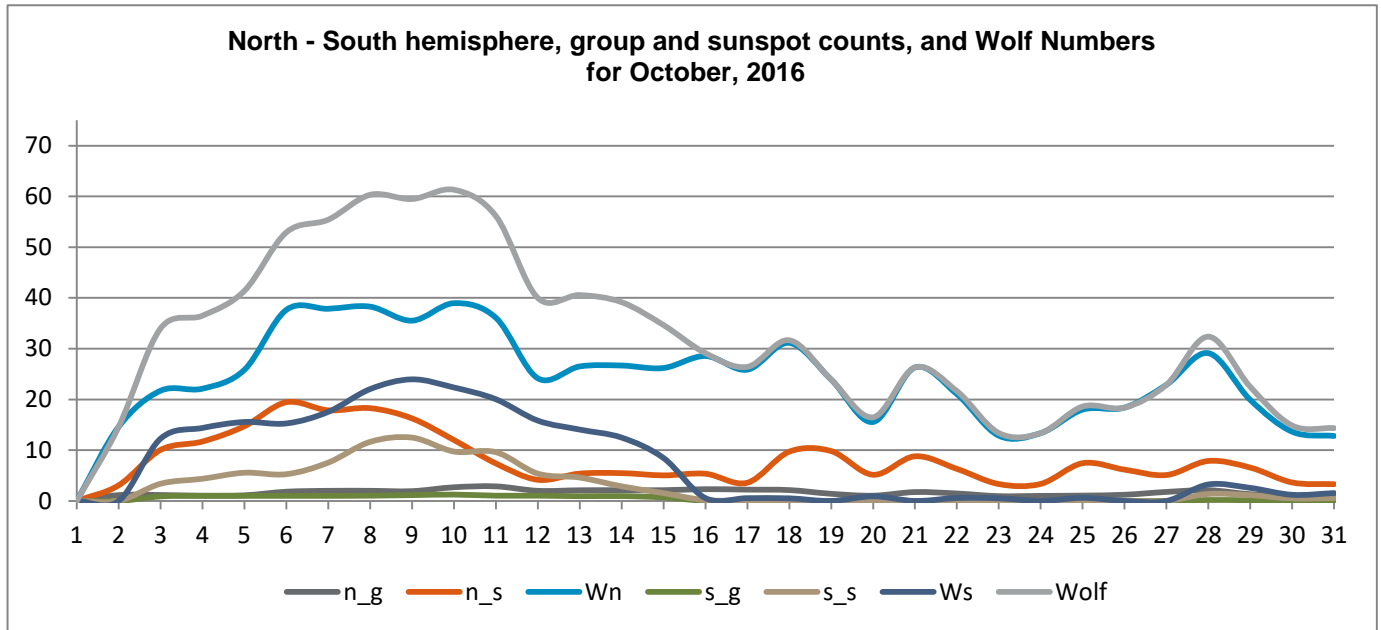
American Relative Sunspot Numbers (Ra) for
 October, 2016 [**boldface = maximum, minimum**]

DAY	NumObs	RAW	Ra
1	24	0	0
2	30	6	4
3	27	32	25
4	34	38	31
5	27	39	31
6	30	52	41
7	30	54	42
8	33	56	44
9	33	59	46
10	34	58	44
11	28	54	39
12	27	39	30
13	26	38	32
14	33	39	32
15	33	34	25
16	34	27	21
17	32	26	21
18	28	30	22
19	30	22	17
20	31	16	13
21	28	26	20
22	29	20	15
23	28	13	11
24	29	14	12
25	26	17	14
26	24	17	12
27	24	20	15
28	24	27	21
29	30	17	12
30	35	6	4
31	34	13	10
Average	29.5	29.4	22.7

Obs	#Obs	Name
AAX	14	Alexandre Amorim
AJV	21	J. Alonso
ARAG	31	Gema Araujo
ASA	26	Salvador Aguirre
BARH	14	Howard Barnes
BERJ	22	Jose Alberto Berdejo
BRAB	30	Brenda Branchett
BRAF	12	Raffaello Braga
BROB	22	Robert Brown
BSAB	22	Santanu Basu

CHAG	21	German Morales Chavez
CIOA	4	Ioannis Chouinavas
CKB	26	Brian Cudnik
CNT	9	Dean Chantiles
CVJ	15	Jose Carvajal
DEMF	8	Frank Dempsey
DJOB	12	Jorge del Roserio
FERJ	26	Javier Ruiz Fernandez
FLET	27	Tom Fleming
FLF	13	Fredirico Luiz Funari
FTAA	4	Tadeusz Figiel
FUJK	18	K. Fujimori
HALB	8	Brian Halls
HAYK	8	Kim Hay
HOWR	25	Rodney Howe
JDAC	15	David Jackson
JENS	2	Simon Jenner
JGE	6	Gerardo Jimenez Lopez
KAND	23	Kandilli Observatory
KAPJ	11	John Kaplan
KNJS	31	James & Shirley Knight
KROL	26	Larry Krozel
LEVM	22	Monty Leventhal
LKR	10	Kristine Larsen
LRRR	27	Robert Little
MARE	5	Enrico Mariani
MCE	19	Etsuiku Mochizuki
MILJ	13	Jay Miller
MJAF	31	Juan Antonio Moreno Quesada
MJHA	27	John McCammon
MWU	17	Walter Maluf
ONJ	9	John O'Neill
RLM	14	Mat Raymonde
SDOH	31	Jan Alvestad (SDO)
SIMC	9	Clyde Simpson
SNE	6	Neil Simmons
SONA	9	Andries Son
STAB	30	Brian Gordon-States
SUZM	17	Miyoshi Suzuki
TESD	31	David Teske
URBP	12	Piotr Urbanski
VARG	28	A. Gonzalo Vargas
VIDD	4	Dan Vidican
VRUA	8	Ruben Verboven
WILW	27	William M. Wilson

Total Observers: 55
Total Observations: 958



There were 38 out of 55 observers who counted northern and southern hemisphere groups and sunspots this month. It looks like the northern hemisphere was predominant with no days of crossover.

Reporting Addresses:

Sunspot Reports – Kim Hay solar@aavso.org

SID Solar Flare Reports – Rodney Howe ahowe@frii.com